

TAHO

Tasmanian Archive + Heritage Office

State Records Guideline No 15

Recordkeeping Strategies for Websites and Web pages

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Information Security Classification

This document has been security classified using the Tasmanian Government Information Security classification standard as PUBLIC and will be managed according to the requirements of the Tasmanian Government Information Security Policy.

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Ross Latham
State Archivist

I Introduction

All data or documents that are published by websites are State records and subject to the requirements of the *Archives Act 1983* and should be managed within the framework of the agency's recordkeeping requirements. These records must be actively maintained until they are either destroyed or transferred to the Tasmanian Archives and Heritage Office for long-term preservation.

There are a number of reasons that agencies must keep appropriate records of webpages and websites as they:

- provide evidence of the business of government
- fulfil legal requirements
- meet audit requirements
- support business decision making and functions
- document corporate knowledge and history
- contribute to the documentation of the Tasmanian community's history

Agencies should take into account relevant legislation, policies and guidelines

These include:

- *Archives Act 1983*
- *Evidence Act 2001*
- *Electronic Transactions Act 2000*
- *Libraries Act 1984*
- *Personal Information Protection Act 2004*
- *Tasmanian Government Web Publishing Standards*

Section 10 of the *Archives Act 1983* requires all relevant authorities to make proper records of the business of their organisations and keep them until they are dealt with under other sections of the Act.

The *Disposal Schedule for Common Administrative Records DA No. 2157* authorises the transfer of significant electronic publications to STORS which fulfils agency recordkeeping requirements. Agencies need to capture less significant publications in their own recordkeeping systems. Depositing copies of publications in STORS also meets the legal deposit obligations under the *Libraries Act 1984*.

This guideline extends the discussion on keeping appropriate records of web content in the *Tasmanian Government Web Publishing Framework - Web Content Management Guidelines*.

I.1 Purpose

This guideline articulates key principles for managing records of websites, webpages (public or internal) and supporting records and provides a range of recordkeeping strategies that agencies can use to manage these as State records.

1.2 Authority

This guideline is issued under the provisions of Section 10A of the *Archives Act 1983*. Guidelines issued by the State Archivist under this Section set standards, policy, and procedures relating to the making and keeping of State records. This section also requires all relevant authorities to take all reasonable steps to comply with these guidelines, and put them into effect.

Keyword	Interpretation
MUST	The item is mandatory.
MUST NOT	Non-use of the item is mandatory.
SHOULD	Valid reasons to deviate from the item may exist in particular circumstances, but the full implications need to be considered before choosing this course.
SHOULD NOT	Valid reasons to implement the item may exist in particular circumstances, but the full implications need to be considered before choosing this course.
RECOMMENDS RECOMMENDED	The item is encouraged or suggested.

'MUST' and 'MUST NOT' statements are highlighted in capitals throughout the Guideline. Agencies deviating from these MUST advise TAHO of the decision to waive particular requirements.

Agencies deviating from a 'SHOULD' or 'SHOULD NOT' statement MUST record:

- the reasons for the deviation,
- an assessment of the residual risk resulting from the deviation,
- the date at which the decision will be reviewed, and
- whether the deviation has management approval.

Agencies deviating from a 'RECOMMENDS' or 'RECOMMENDED' requirement are encouraged to document the reasons for doing so.

2 Recordkeeping business requirements

Records of websites and webpages should be managed and maintained in accordance with the business recordkeeping requirements of the agency. In making decisions about which records should be captured in recordkeeping systems, agencies should assess the business risks and consider if the records are required to provide evidence, fulfil legal obligations or support agency business. This assessment will assist agencies to identify an appropriate recordkeeping strategy for their web resources.

The requirements to create and maintain records fall into three main categories:

- regulatory (or 'accountability' or 'legislative') requirements
- business (or 'operational') requirements
- stakeholder (government and public) expectations

Agencies must be able to verify what content or transactional services were accessible from their websites at a particular time.

Recordkeeping Advice No. 2 – All about Appraisal outlines the process to determine which records need to be captured into recordkeeping systems and how long the records need to be kept.

As with other formats (such as hardcopy and email) records of websites and webpages can be divided into two categories:

- **Business records** – records which relate to the ongoing business of the agency and must be retained as a record
- **Short-term value records** – records which facilitate agency business but are of a trivial nature or of such short-term value that they do not support or contribute to the ongoing business of the agency.

2.1 Business records should be managed within recordkeeping systems

Records of websites and business records created and published on agency websites must be saved into a recordkeeping system to provide evidence of business activity and meet legal requirements. *The Australian Standard for Records Management AS ISO 15489* contains a description of the essential characteristics of a recordkeeping system.

Records of websites and webpages can be captured and managed within recordkeeping systems either by capturing these records into existing corporate recordkeeping systems, or by integrating recordkeeping functionality into content management tools or business applications

Authority to dispose of these records will be contained in the relevant disposal schedule or, if the records are not covered by any schedule, be obtained from the State Archivist.

2.2 Short term value records

Short-term value records created and published on agency websites may not need to be saved into a recordkeeping system and can be destroyed when reference ceases. Short-term records are described in more detail and their disposal authorised in the *Disposal Schedule for Short-term Value Records DA No. 2158*. They include:

- records which duplicate (or extract) information which is already held elsewhere
- records with little or no administrative, fiscal, evidential, cultural, or no known historical, value

3 Records of websites and webpages should be managed over time

The issues of system changes and media and file format obsolescence, and the continued linkage of recordkeeping metadata with individual records need to be managed to ensure appropriate records are maintained for as long as necessary.

When changing systems agencies will need to migrate all records and associated metadata except short-term value records due for destruction. System changes include system upgrades or changes in departmental

structures. Following major changes in departmental structures, legacy records from discontinued systems may also need to be migrated.

The viability of techniques for refreshing and migrating media formats, and for mitigating file format obsolescence remains unproven over long periods of time. This is especially true for websites where the look-and-feel and specific functionality may be compromised as a result of file format migration.

The Tasmanian Heritage and Archives Office and the Inter Agency Policy and Projects Unit of the Department of Premier and Cabinet are working to identify appropriate strategies and techniques for the long term preservation of electronic records. In the meantime agencies should develop and implement their own strategies for refreshing and migrating media formats, migrating file formats, and managing recordkeeping metadata.

4 Recordkeeping strategies

Agencies should conduct a risk assessment to assist them in identifying and selecting suitable recordkeeping strategies for their websites and webpages. A risk assessment will help determine if different sections of the website have varying levels of associated recordkeeping risks.

Complex websites generally have increased recordkeeping risks. The complexity of an agency's website will depend on its characteristics, underlying technology, sensitivity and purpose, and whether it is document centred or is a gateway interface to business applications.

Generally, websites that are gateway interfaces to business applications may have higher levels of complexity and associated recordkeeping risks. Key issues for these websites include the need to ensure authenticity of identity and security of data. Agencies need to determine the most appropriate place to capture records of these transactions (i.e. at the web-interface, the business application, or a combination of both).

Often document-like objects published on a website are copies of documents that have already been captured into the agency's recordkeeping system. Where this occurs it is only necessary to implement a strategy that will ensure details relating to the publication of the document on the website are captured and maintained.

Some websites are created using content management systems but others are created without automated content controls and they can only be managed with regular snapshots and change logs.

Agencies should implement one or more of the following strategies to ensure adequate records of websites and webpages are captured. The implementation of some of these strategies on their own may not be an adequate recordkeeping solution. Agencies therefore should select an appropriate strategy or combination of strategies depending on the type or complexity of the website.

Many of these strategies involve keeping logs of website transactions that will contain personal information about the user. Agencies must be aware of, and comply with, the Personal Information Protection Act 2004.

4.1 Content Management Systems

A content management system (CMS) is a tool that allows users to manage content by simplifying or automating many processes involved in web publishing. This strategy can be used for all types of websites.

Method

- Implement a CMS with adequate recordkeeping functionality that is fully implemented

or

- Integrate the CMS with the corporate recordkeeping system where the CMS does not have adequate recordkeeping functionality

Benefits

- A proper record of websites is captured and maintained
- A CMS is likely to be less complex than creating and maintaining snapshots, change logs and activity logs for websites

Risks

- CMS are typically marketed as automated web processing solutions rather than recordkeeping systems and, despite incorporating version control, may be unable to capture and maintain a proper record of a website over time
- If the CMS is not integrated with the corporate recordkeeping system there is no direct link to records management tools, therefore records must be maintained within the system until examined and sentenced in accordance with an authorised disposal schedule

4.2 Snapshots and change logs

Snapshots are copies of a website taken at regular intervals. These need to be augmented with change logs that record changes to the website between snapshots. This strategy can be used for websites that only present information or publications where there is no interaction with the user.

Method

- Determine how frequently copies of the website should be created. This may be at pre-defined intervals (eg. every month) or when significant updates are made.
- Determine the recordkeeping metadata elements that should be captured in the change log. (The National Archives of Australia's Recordkeeping Metadata Standard for Commonwealth Agencies is the endorsed scheme for use in Tasmanian State and local government organisations.)

For example:

- date and time of change
 - action officer
 - details of change
- Establish procedures and processes to ensure a new change log is created and updated between snapshots
- Create and capture each snapshot and its recordkeeping metadata within a corporate recordkeeping system
- Capture each change log within a corporate recordkeeping system
- Agencies must not rely on snapshots saved in 'Our Digital Island'

Benefits

Agencies can, if necessary, re-create webpages and content that were available on a website at a particular point in time.

Risks

- Creation and re-creation of a time specific view of a webpage or website is extremely technically difficult and resource intensive
- The maintenance of snapshots over time involves the storage of large volumes of data and it can be difficult to assess disposal dates for the records captured within the snapshot

4.3 Activity logs

Activity logs capture and maintain exchanges of data between a user and a website. This strategy can be used for gateway websites that provide a direct entry point to business applications, where the gateway simply provides access to the business application and the application does not have recordkeeping functionality. For example, database searches and results where no additional content or context is added by the website.

Method

- Determine the recordkeeping metadata elements that should be captured for individual website transactions and ensure these remain meaningful for as long as the log is required to be accessible.

For example:

- date and time of event
- information about the user (IP address or domain name, web browser used, user name or identification)
- webpage accessed and actions performed (such as searches and queries)
- the resources returned to the user (including any scripts that are executed)
- Establish procedures and processes to ensure the activity log is created and updated
- Routinely capture activity logs within a corporate recordkeeping system

Benefits

A full and accurate record of website service delivery is captured and maintained.

Risks

The creation of usable activity logs can be complex and technically difficult.

4.4 Business applications with recordkeeping functionality

Complete records of the transaction are captured and maintained in the business application. This strategy can be used for gateway websites that provide a direct entry point to business applications, where the gateway simply provides access to the business application and the application has adequate recordkeeping functionality. For example, a business transaction which involves the payment of money where a receipt is issued.

Method

- Determine the recordkeeping metadata elements that should be captured for individual website transactions

For example:

- date and time of event
- information about the user (IP address or domain name, web browser used, user name or identification)
- webpage accessed and actions performed (such as searches and queries)
- the resources returned to the user (including any scripts that are executed)
- security and authentication

Benefits

A proper record of transactions is captured and maintained.

Risks

The business application may not have the required recordkeeping functionality to capture complete records of website service delivery.

4.5 Combination of business applications with recordkeeping functionality and activity logs

Recordkeeping metadata elements relating to the transaction are captured in either the business application or an activity log. This strategy is suitable for gateway websites that provide a direct entry point to business applications, where the web-interface adds additional content and context. For example, the Land Information System Tasmania (the LIST).

Method

- Identify the recordkeeping metadata elements that are to be captured in the activity log and the business application
- Manage the recordkeeping metadata elements that relate to a single transaction within the activity log and the business application and link them so that recordkeeping actions can be applied to all of the individual recordkeeping metadata elements for each record

Benefits

This strategy incorporates recordkeeping functionality into both the business application and the web-interface.

Risks

- The creation of usable activity logs can be complex and technically difficult
- Integrating recordkeeping functionality into business applications and linking metadata elements captured in activity logs and business applications may be difficult and expensive.

4.6 Document-like objects

Individual document-like objects posted to a website are captured and maintained in a recordkeeping system. This strategy should only be used to supplement other strategies to meet identified business needs.

Method

- Determine which recordkeeping metadata elements should be created for each object posted to the website
- Capture a copy of each object and its recordkeeping metadata within a recordkeeping system. (STORS is an approved recordkeeping system for significant publications that are identified for permanent retention in the *Disposal Schedule for Common Administrative Functions DA No 2157*)

Benefits

- It is possible to render each object as it was when published on the website
- The complexity of maintaining the functionality and look-and-feel of an entire website is avoided
- Where objects are deposited into STORS the responsibility for maintaining accessibility is transferred to the State Library of Tasmania

Risks

Managing individual objects does not readily enable reconstruction of an entire website at a single point in time.

5 Definitions

Agency is used in this guideline to refer to all agencies, authorities, statutory offices, departments, councils and other organisations that are subject to, and defined in, the *Archives Act 1983*.

Record – is 'a document or an object that is, or has been, made or kept by reason of any information or matter that it contains or can be obtained from it or by reason of its connection with any event person, circumstance, or thing'. A document includes any printed or written material' and an object includes a 'sound recording, coded storage device, magnetic tape or disc, microfilm, photograph, film, map, plan, or model or painting or other pictorial or graphic work.'

Recordkeeping - making and maintaining complete, accurate and reliable evidence of business transactions in the form of recorded information.

Recordkeeping metadata – data that enables the creation, management, and use of records through time. Recordkeeping metadata can be used to identify, authenticate, and contextualise records as well as the people, processes and systems that create, manage, maintain and use them.

Recordkeeping system - a system which captures, manages and provides access to records through time.

State records - records of State government agencies/departments, State authorities, or local authorities. These public bodies are defined in Section 3 of the *Archives Act 1983*.

Webpage - information that displays as a single page on the World Wide Web.

Website – refers to all types of web-based sites, including public websites, virtual private networks, extranets and intranets.

Further Advice

For more detailed advice, please contact:

Government Information and Strategy Unit
Tasmanian Archive and Heritage Office
91 Murray Street
HOBART TASMANIA 7000
Telephone: 03 6165 5581
Email: gisu@education.tas.gov.au

Acknowledgements

The advice in this guideline draws on international best practice; in particular:

- Archives New Zealand, Guide to developing recordkeeping strategies for websites
- National Archives of Australia, Guidelines for keeping records of web-based activity in the Commonwealth Government
- Queensland State Archives, Policy Review – Managing Records of Webpages and Websites – Discussion Paper

Further Information

Tasmanian Government, Website Standards¹

Tasmanian Government, Web Content Management Guidelines.²

Tasmanian Archives and Heritage Office of Tasmania, *Recordkeeping Advice No. 9 – Records Appraisal*

Standards Australia, Australian Standard – *Records Management AS ISO 15489* ³

National Archives of Australia, *Recordkeeping Metadata Standard for Commonwealth Agencies*⁴.

¹ www.e.government.tas.gov.au

² http://www.egovernment.tas.gov.au/standards_and_guidelines/web_content_management_guidelines/Web_Content_Management_Guidelines.pdf

³ www.standards.org.au

⁴ <http://www.naa.gov.au/records-management/publications/>